

1. A method comprising:

receiving through an antenna system a first portion of a beacon frame signal via a first signal path and a second portion of said beacon frame signal via a second signal path;
measuring the signal quality of said first portion of said beacon frame signal and of said second portion of said beacon frame signal; and
selecting between said first signal path and said second signal path for receiving a subsequent signal, wherein said selecting is based on the signal quality of said first portion and said second portion of said beacon frame signal.

2. The method of claim 1 wherein said antenna system is the steerable beam type and wherein said first signal path and said second signal path are along directionally distinct beams.

3. The method of claim 1 wherein said antenna system is the diversity switching type and wherein said first signal path and said second signal path are associated with distinct antennas.

4. The method of claim 1 wherein said selecting comprises:
choosing said first signal path when the signal quality of said first portion is better than the signal quality of said second portion; and
choosing said second signal path when the signal quality of said second portion is better than the signal quality of said first portion.

5. The method of claim 1 wherein said measuring is performed only on every M^{th} received beacon frame signal, wherein M is a positive integer greater than one.

6. The method of claim 1 wherein said beacon frame signal is a transmission of a beacon frame by an access point that operates in accordance with an IEEE 802.11 specification.

7. The method of claim 6 wherein said beacon frame comprises a field for enhancing signal quality estimation.

8. The method of claim 7 wherein said first portion of said beacon frame signal conveys a first portion of said field and said second portion of said beacon frame signal conveys a second portion of said field.

9. A method comprising:

receiving through an antenna system a first portion of a field that constitutes a beacon frame via a first signal path and a second portion of said field via a second signal path;

measuring the signal quality of said first portion as received via said first signal path and of said second portion as received via said second signal path; and

selecting one of said first signal path and said second signal path for receiving a subsequent signal, wherein said selecting is based on the signal quality of said first portion and said second portion of said field.

10. The method of claim 9 wherein said antenna system is the steerable beam type and said first signal path and said second signal path are along directionally distinct beams.

11. The method of claim 9 wherein said antenna system is the diversity switching type and said first signal path and said second signal path are associated with distinct antennas.

12. The method of claim 9 wherein said selecting comprises:

choosing said first signal path when the signal quality of said first portion of said field is better than said signal quality of said second portion of said field; and

choosing said second signal path when the signal quality of said second portion of said field is better than said signal quality of said first portion of said field.

13. The method of claim 9 wherein said local area network is in accordance with an IEEE 802.11 specification.

14. A method comprising:

receiving through an antenna system a first signal via a first signal path on a shared-communications channel;

measuring the signal quality of said first signal;

receiving a portion of a beacon frame signal via a second signal path in said shared-communications channel after said receiving of said first signal;

measuring the signal quality of said portion of said beacon frame signal; and

selecting between said first signal path and said second signal path for receiving a subsequent signal, wherein said selecting is based on the signal quality of said first signal and said beacon frame signal.

15. The method of claim 14 wherein said selecting comprises:

choosing said first signal path when the signal quality of said first signal is better than the signal quality of said beacon frame signal; and

choosing said second signal path when the signal quality of said beacon frame signal is better than the signal quality of said first signal.

16. The method of claim 14 wherein said antenna system is the steerable beam type and wherein said first signal path and said second signal path are along directionally distinct beams.

17. The method of claim 14 wherein said antenna system is the diversity switching type and wherein said first signal path and said second signal path are associated with distinct antennas.

18. The method of claim 14 wherein said shared-communications channel constitutes a local area network that operates in accordance with an IEEE 802.11 specification.

19. The method of claim 14 wherein said first signal is a beacon frame transmission by an access point.

20. The method of claim 14 wherein said beacon frame comprises a field for enhancing signal quality estimation.

21. An apparatus comprising:
an antenna system for switching between a first signal path and a second signal path;

a receiver for receiving a first portion of a beacon frame signal via said first signal path and a second portion of said beacon frame signal via said second signal path; and
a processor for:

- (i) measuring the signal quality of said first portion and said second portion of said beacon frame signal; and
- (ii) selecting between said first signal path and said second signal path for doing one of receiving and transmitting a subsequent signal, wherein said selecting is based on the signal quality of said first portion and said second portion of said beacon frame signal.

22. The apparatus of claim 21 wherein said antenna system is the steerable beam type and wherein said first signal path and said second signal path are along directionally distinct beams.

23. The apparatus of claim 21 wherein said antenna system is the diversity switching type and wherein said first signal path and said second signal path are associated with distinct antennas.

24. The apparatus of claim 21 wherein said antenna system is also for providing one of said first portion and said second portion of said beacon frame signal to said receiver.

25. The apparatus of claim 21 wherein said beacon frame signal is a transmission of a beacon frame by an access point.

26. The apparatus of claim 25 wherein said beacon frame comprises a field for enhancing signal quality estimation.